CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER No. 96-034
NPDES PERMIT NO. CA0038628

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

CENTRAL MARIN SANITATION AGENCY
SAN RAFAEL SANITATION DISTRICT
SANITARY DISTRICT NO. 1 OF MARIN COUNTY
SANITARY DISTRICT NO. 2 OF MARIN COUNTY
CITY OF LARKSPUR
IN MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

1. Central Marin Sanitation Agency (CMSA), hereinafter called the discharger, submitted a Report of Waste Discharge dated July 14, 1995 for reissuance of waste discharge requirements and a permit to discharge wastewater to waters of the State and the United States under the National Pollutant Discharge Elimination System (NPDES).

2. This discharge is presently regulated by Waste Discharge Requirements in Order No. 91-003, adopted by the Board on January 16, 1991.

3. The discharger owns and operates a wastewater treatment plant, located at 1301 Andersen Drive, San Rafael, Marin County, California. The plant provides secondary level treatment for domestic wastewater from its four member agencies: San Rafael Sanitation District, Sanitary Districts No. 1 and 2 of Marin County, and the City of Larkspur. The discharger also transports and treats sewage from four other sewerage agencies pursuant to separate agreements with member agencies. The four other sewerage agencies are: City of San Rafael, Murray Park Sewer Maintenance District, San Quentin Sewer Maintenance District, and California Department of Corrections (San Quentin Prison). The treatment plant has a design capacity of 10.0 million gallons per day (mgd) average dry weather flow. The plant was designed to provide secondary treatment for flows up to 30 mgd, primary treatment for flows up to 90 mgd, and has a hydraulic capacity of 125 mgd. The plant presently discharges an average dry weather flow of 7.4 mgd, and an annual average effluent flow of 12.4 mgd (based on 1995 data).

4. The U.S. Environmental Protection Agency (USEPA) and the Board have classified this discharge as a major discharge.

5. Treatment facilities utilized prior to discharge to San Francisco Bay consist of: Raw sewage passes through comminuters at remote pump stations and is pumped through force mains to the plant. Influent is metered and passes through bar screens and grit removal prior to primary treatment using clarifiers. Flows exceeding 30 mgd are routed around biological treatment to the disinfection facility. Flows below this level are treated by high-rate trickling filters followed by conventional activated sludge, secondary clarification, chlorination, and dechlorination. The dechlorinated flow is discharged through a submarine outfall. A treatment process schematic diagram is included as an attachment.

6. Treated wastewater is currently discharged 8,000 ft. offshore at depth between 12 feet and 28 feet below MLLW into San Francisco Bay (Central Bay) through a submerged diffuser (Latitude 37° 56' 54"; Longitude 122° 27' 23"). The effluent receives an initial dilution of at least 10:1 at all time.

7. Wastewater solids are digested in an anaerobic digester, centrifuged and currently disposed of at the Redwood Sanitary Landfill. Grit is hauled to Marin Sanitary and disposed of at the same landfill.

8. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources control Board and the Office of Administrative Law on July 20 and November 13, respectively, of 1995. A summary of regulatory provisions is contained in Title 23 of the California Code of Regulations at Section 3912. The Basin Plan defines beneficial uses and water quality objectives for surface and groundwaters in the region, as well as effluent limitations and discharge prohibitions intended to protect beneficial uses. This Order implements the plans, policies and provisions of the Board's Basin Plan.

9. The Basin Plan contains water quality objectives and beneficial uses for Central San Francisco Bay and contiguous waters. The beneficial uses of Central San Francisco Bay and contiguous water bodies include:

   - Industrial Service and Process Supply
   - Navigation
   - Water Contact Recreation
   - Non-contact Water Recreation
   - Ocean Commercial and Sport Fishing
   - Wildlife Habitat
   - Preservation of Rare and Endangered Species
   - Fish Migration and Spawning
   - Shellfish Harvesting
   - Estuarine Habitat

10. Effluent limitations in this permit are based on the Basin Plan, USEPA water quality criteria (Quality Criteria for Water, EPA 440/5-86-001, 1986; Gold Book), applicable Federal Regulations (40 CFR Parts 122 and 131), and Best Professional Judgement.

11. The effluent limit for copper in this permit is based on a water quality objective for copper of 4.9 µg/l and the Board's study to develop a site-specific water quality objective for copper for San Francisco Bay, based on Best Professional Judgement. This study and associated staff analysis are described in the September 25, 1992 Board staff report entitled "Revised Report on Proposed Amendment to Establish a Site Specific Objective for Copper for San Francisco Bay."

12. This permit may be amended in the future to include specific copper mass loading limitations and loading reductions in accordance with an approved copper wasteload allocation.

13. The discharge receiving water, is an estuarine water with salinity that is generally marine in character. Therefore, effluent limitations for the discharge are based on marine water quality objectives.

14. Federal Regulations for storm water discharges were promulgated by the USEPA on November 19, 1990. The regulations [40 Code of Federal Regulations (CFR) Parts 122, 123, and 124] require specific categories of industrial activity (industrial storm water) to obtain a NPDES permit and to implement Best Available Technology Economically Available and Best Conventional Pollutant Control Technology to control pollutants in industrial storm water discharges.

15. State Water Resources Control Board (State Board) issued a statewide General Industrial Activities Storm Water Permit (General Permit) on November 19, 1991 and amended on September 17, 1992. The discharger filed its Notice of Intent with the State Board to comply with the terms of the General Permit and is currently a permittee of the General Permit. This Waste Discharge Requirements does not cover storm water discharge from the facility.

16. The sewerage collection systems contributing to the Discharger's treatment plant are owned and operated separately by each of the four CMSA member agencies. Each agency is responsible for the operation, maintenance of its own collection system and is responsible for spill/overflow reporting.

17. An Operations and Maintenance Manual is maintained by the discharger for purposes of providing plant, collection system, and regulatory personnel with a source of information describing all equipment, recommended operation strategies, process control monitoring, and maintenance activities.

18. This Order serves as an NPDES Permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of the Public Resources Code [California Environmental Quality Act (CEQA)] pursuant to Section 13389 of the California Water Code.

19. The discharger and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided an opportunity to submit their written views and recommendations.

20. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, and to the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, that the discharger shall comply with the following:

A. DISCHARGE PROHIBITIONS

1. Discharge of treated wastewater at a location or in a manner different from that described in findings of this Order is prohibited.

2. Discharge at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited.

3. The bypass or overflow of untreated or partially treated wastewater to waters of the State, either at the treatment plant or from the collection system or pump stations tributary to the treatment plant, is prohibited.

4. The average dry weather flow discharge shall not exceed 10.0 mgd. The average dry weather flow shall be determined over three consecutive dry weather months each year.

5. Discharges of water, materials, or wastes other than storm water to a storm drain system or waters of the State are prohibited.

6. Storm water discharges shall not cause pollution, contamination, or nuisance.

B. EFFLUENT LIMITATIONS

The term "effluent" in the following limitations means the fully treated wastewater effluent from the discharger's wastewater treatment facility, as discharged to Central San Francisco Bay.

1. The effluent shall not exceed the following limits:

Constituent	Units	Monthly Average	Weekly Average	Daily Maximum	Instantaneous Maximum
a. Carbonaceous BOD	mg/l	25	40	--	--
b. Total Suspended Solids	mg/l	30	45	--	--
c. Settleable Matter	ml/l-hr	0.1	--	--	0.2
d. Total Chlorine Residual (1)	mg/l	--	--	--	0.0

Footnote:
(1) Requirement defined as below the limit of detection in standard test methods.

2. pH: the pH of the discharge shall not exceed 9.0 nor be less than 6.0.

3. Total Coliform Bacteria:

The treated wastewater, at some place in the treatment process prior to discharge, shall meet the following limits of bacteriological quality:

a. The moving median value for the Most Probable Number (MPN) of total coliform bacteria in any five (5) consecutive samples shall not exceed 240 MPN/100 ml; and,

b. Any single sample shall not exceed 10,000 MPN/100 ml.

3a. Fecal Coliform Bacteria:

The discharger may choose to meet the following limits of bacteriological quality instead of meeting 3.a and 3.b above if the discharger can establish to the satisfaction of the Executive Officer of the Board that the use of the fecal coliform limits will not impair the identified beneficial uses in the vicinity of the outfall:

a. The five (5) day log mean fecal coliform density shall not exceed 200 MPN/100 ml; and,

b. The ninetieth percentile value of fecal coliform density shall not exceed 400 MPN/100 ml.

4. 85 Percent Removal, CBOD and TSS:

The arithmetic mean of the carbonaceous biochemical oxygen demand and total suspended solids values, by weight, for effluent samples collected in each calendar month shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period.

5. TOXIC SUBSTANCES EFFLUENT LIMITATIONS:

The effluent shall not exceed the following limits (1) (2):

Table 1
(All limits in μg/l)

Constituent		Monthly Average (3)	Daily Average (3)
1. Arsenic	(5)		200
2. Cadmium	(5)		30
3. Chromium	(4) (5)		110
4. Copper			37
5. Lead	(5)		53
6. Mercury		0.21	1
7. Nickel	(5)		65
8. Cyanide	(6)		25
9. Selenium	(5)		50
10. Silver			23
11. Zinc	(5)		580
12. Phenols			500

Footnotes:

(1) These limits are based on marine water quality objectives. Compliance with these limits is intended to be achieved through secondary treatment and as necessary, pretreatment and source control.

(2) All analyses shall be performed using current USEPA methods, as specified in 40 CFR 136, or equivalent reference approved in writing by the Executive Officer. Method Detection Limits, Practical Quantitation Limits, and Limits of Quantitative Levels will be taken into account in determining compliance with effluent limitations.

(3) Limits apply to the average concentration of all samples collected during the averaging period (Daily - 24-hour period; Monthly - calendar month).

(4) The discharger may meet this limit as total chromium.

(5) Effluent limitation may be met as a four-day average. If compliance is to be determined based on a four-day average, then four separate 24-hour composite samples shall be obtained over four consecutive days, and the concentration results for each composite sample shall be reported, as well as the average of the four.

(6) The discharger may demonstrate compliance with this limitation by measurement of weak acid dissociable cyanide.

6. Effluent Acute Toxicity:

Representative samples of the effluent shall meet the following limits for acute toxicity: (Provision E.5 of this Order applies to these bioassays.)

The survival of organisms in undiluted effluent shall be an eleven (11) sample median value of not less than 90 percent survival, and an eleven (11) sample 90 percentile value of not less than 70 percent survival. The eleven sample median and 90th percentile effluent limitations are defined as follows:

11 sample median: A bioassay test showing survival of less than 90 percent represents a violation of this effluent limit, if five or more of the past ten or less bioassay tests show less than 90 percent survival.

90th percentile: A bioassay test showing survival of less than 70 percent represents a violation of this effluent limit, if one or more of the past ten or less bioassay tests show less than 70 percent survival.

C. RECEIVING WATER LIMITATIONS

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

   a. Floating, suspended, or deposited macroscopic particulate matter or foam; or

   b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses; or

   c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels; or

   d. Visible, floating, suspended, or deposited oil or other products of petroleum origin; or

   e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on wildlife, waterfowl, or other aquatic biota, or which render any of these unfit for human consumption, either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State any place within one foot of the water surface:

   a. Dissolved Oxygen — 5.0 mg/l, minimum

      The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause concentrations less than that specified above, then the discharge shall not cause further reduction in ambient dissolved oxygen concentrations.

   b. Dissolved Sulfide — 0.1 mg/l, maximum

   c. pH — Variation from normal ambient pH by more than 0.5 pH units.

   d. Un-ionized Ammonia — 0.025 mg/l as N, annual median
      0.16 mg/l as N, maximum

e.	Nutrients	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.

3. The discharge shall not cause a violation of any particular water quality standard for receiving waters adopted by the Board or the State Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

4. Storm Water Discharge

   a. Storm water discharges shall not adversely impact human health or the environment.

   b. Storm water discharges shall not cause or contribute to a violation of any applicable water quality objective for receiving waters contained in the Basin Plan.

D. SLUDGE MANAGEMENT PRACTICES

1. All sludge generated by the discharger must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill in accordance with 40 CFR Part 503. All the requirements in 40 CFR 503 are enforceable by USEPA whether or not they are stated in an NPDES permit or other permit issued to the discharger.

2. Sludge treatment, storage, and disposal or reuse shall not create a nuisance, such as objectionable odors or flies, or result in groundwater contamination.

3. Duty to mitigate: The discharger shall take all reasonable steps to prevent or minimize any sludge use or disposal which has a likelihood of adversely affecting human health or the environment.

4. The discharge of sewage sludge shall not cause waste material to be in a position where it is, or can be carried from the sludge treatment and storage site and deposited in the waters of the State.

5. The sludge treatment and storage site shall have facilities adequate to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the temporary storage site. Adequate protection is defined as protection from at least a 100 year storm and protection from the highest possible tidal stage that may occur.

6. The Discharger is hereby notified that on February 19, 1993, the USEPA issued the final rule for the use and disposal of sewage sludge (40 [Code of Federal Regulations] (CFR) Part 503). This rule requires that producers of sewage sludge meet certain reporting, handling, and disposal requirements. The Discharger is advised to contact USEPA regarding compliance with 40 CFR Part 503.

7 Currently, all sludge generated by the discharger is disposed of in a municipal solid waste landfill. If the discharger desires to dispose of sludge by a different method, the discharger shall notify the Board and USEPA in writing before start-up of the alternative disposal practice.

8 Sludge that is disposed of in a municipal solid waste landfill must meet the requirements of 40 CFR 258. The discharger's annual self-monitoring report shall include the amount of sludge disposed of, and the landfill(s) to which it was sent.

9 Permanent on-site sludge storage or disposal activities are not authorized by this permit. A Report of Waste Discharge shall be filed and the site brought into compliance with all applicable regulations prior to commencement of any such activity by the discharger.

10 The Board may amend this permit prior to expiration if changes occur in applicable state and federal sludge regulations.

E. PROVISIONS

1. Requirements prescribed by this Order supersede the requirements prescribed by Order No. 91-003. Order No. 91-003 is hereby rescinded.

2. This permit may be reopened to amend the effluent limit for copper once the site-specific water quality objective for copper for San Francisco Bay is fully effective.

3. Where concentration limitations in mg/l or µg/l are contained in this Permit, the following Mass Emission Limitations shall also apply.

   Mass Emission Limit in kg/day = (Concentration Limit in mg/l) x (Actual Flow in million gallons per day averaged over the time interval to which the limit applies) x 3.78 (conversion factor).

4. The discharger shall comply with all sections of this Order immediately upon adoption.

5. Compliance with Acute Toxicity Effluent Limitation

   a. Compliance with Acute Toxicity Effluent Limitation of this Order shall be evaluated by measuring survival of a test species exposed to undiluted effluent for 96 hours in flow-through bioassay. The test species shall be the three-spine stickleback.

   b. All bioassays shall be performed according to protocols approved by the USEPA or State Water Resources Control Board, or published by the American Society for Testing and Materials (ASTM) or American Public Health Association.

6. The discharger shall comply with Toxic Substances Limitations immediately upon adoption of this Order.

7. In reviewing compliance with 85% removal for CBOD and TSS of this Order, the Board will take into consideration difficulties encountered in achieving compliance during periods of extreme wet weather when ordinary treatment plant removal efficiencies are impeded by less concentrated influent resultant from stormwater dilution.

8. In reviewing compliance with wet weather overflows of this Order, the Board will take into consideration the discharger's efforts to control wet weather overflows in accordance with the Basin Plan's strategy for control of wet weather overflows.

9. The Agency shall implement its approved Industrial Pretreatment Program in accordance with Board Order 95-015 and its amendments thereafter. The discharger's responsibilities include, but are not limited to:

   a. Enforcement of national pretreatment standards (e.g. prohibited discharges, categorical standards, local limits) in accordance with 40 CFR 403.5 and Section 307 (B) and (C) of the Clean Water Act.

b. Implementation of the pretreatment program in accordance with the legal authorities, policies, procedures, and financial provisions described in the general pretreatment regulations (40 CFR 403) and the discharger's approved pretreatment program including subsequent modifications to the program.

c. Submission of annual and quarterly reports to EPA and the State as described in Board Order 84-60 and its amendments thereafter.

10. If the discharger chooses to pursue a capacity increase for the treatment plant, information that must be submitted prior to Board consideration of a flow increase must include, but may not be limited to, the following:

a. Engineering reports documenting adequate reliability, capacity and performance of the completed improvements to the treatment facility;

b. Documentation that increased discharges (evaluation must include assessment of wet weather flows) will not result in degradation of receiving waters, or adverse impacts on beneficial uses of receiving waters, in accordance with State and Federal regulations;

c. Plans for including reuse of the treated effluent as an integral part of the wastewater management plan; and

d. Documentation of compliance with the CEQA.

11. The discharger shall review, and update as necessary, its Operations and Maintenance Manual, annually, or within 90 days of completion of any significant facility or process changes. The discharger shall submit to the Board, by April 15 of each year, a letter describing the results of the review process including an estimated time schedule for completion of any revisions determined necessary, and a description or copy of any completed revisions.

12. Annually, the discharger shall review and update as necessary, its Contingency Plan as required by Board Resolution 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or adequately implement a contingency plan will be the basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code. Plan revisions, or a letter stating that no changes are needed, shall be submitted to the Board by April 15 of each year.

13. The discharger shall implement a program to regularly review and evaluate its wastewater collection, treatment and disposal facilities in order to ensure that all facilities are adequately staffed, supervised, financed, operated, maintained, repaired, and upgraded as necessary, in order to provide adequate and reliable transport, treatment, and disposal of all wastewater from both existing and planned future wastewater sources under the discharger's service responsibilities. A Treatment Facilities Evaluation Program report discussing the status of this evaluation program, including any recommended or planned actions, shall be submitted to the Board by April 15 of each year.

14. The discharger shall comply with the Self-Monitoring Program for this order, as adopted by the Board and as may be amended by the Executive Officer.

15. The discharger shall comply with all applicable items of the attached "Standard Provisions and Reporting Requirements " dated August 1993 (attached), or any amendments thereafter.

16. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office. To assume operation of this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. (Refer to Standard Provisions, referenced above). The request must contain the requesting entity's full legal name, the address and telephone number of the persons responsible for contact with the Board and a statement. The statement shall comply with the signatory paragraph described in Standard Provisions and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code.

17. The Board may modify, or revoke and reissue, this Order and Permit if present or future investigations demonstrate that the discharge(s) governed by this Order are causing or significantly contributing to adverse impacts on water quality and/or beneficial uses of the receiving waters.

18. This Order expires on March 20, 2001. The discharger must file a report of waste discharge in accordance with Title 23, Division 3, Chapter 9, Article 3. of the California Administrative Code not later than 180 days before this expiration date as application for reissuance of waste discharge requirements.

19. This Order shall serve as a NPDES permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after the date of its adoption provided the Regional Administrator, USEPA, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

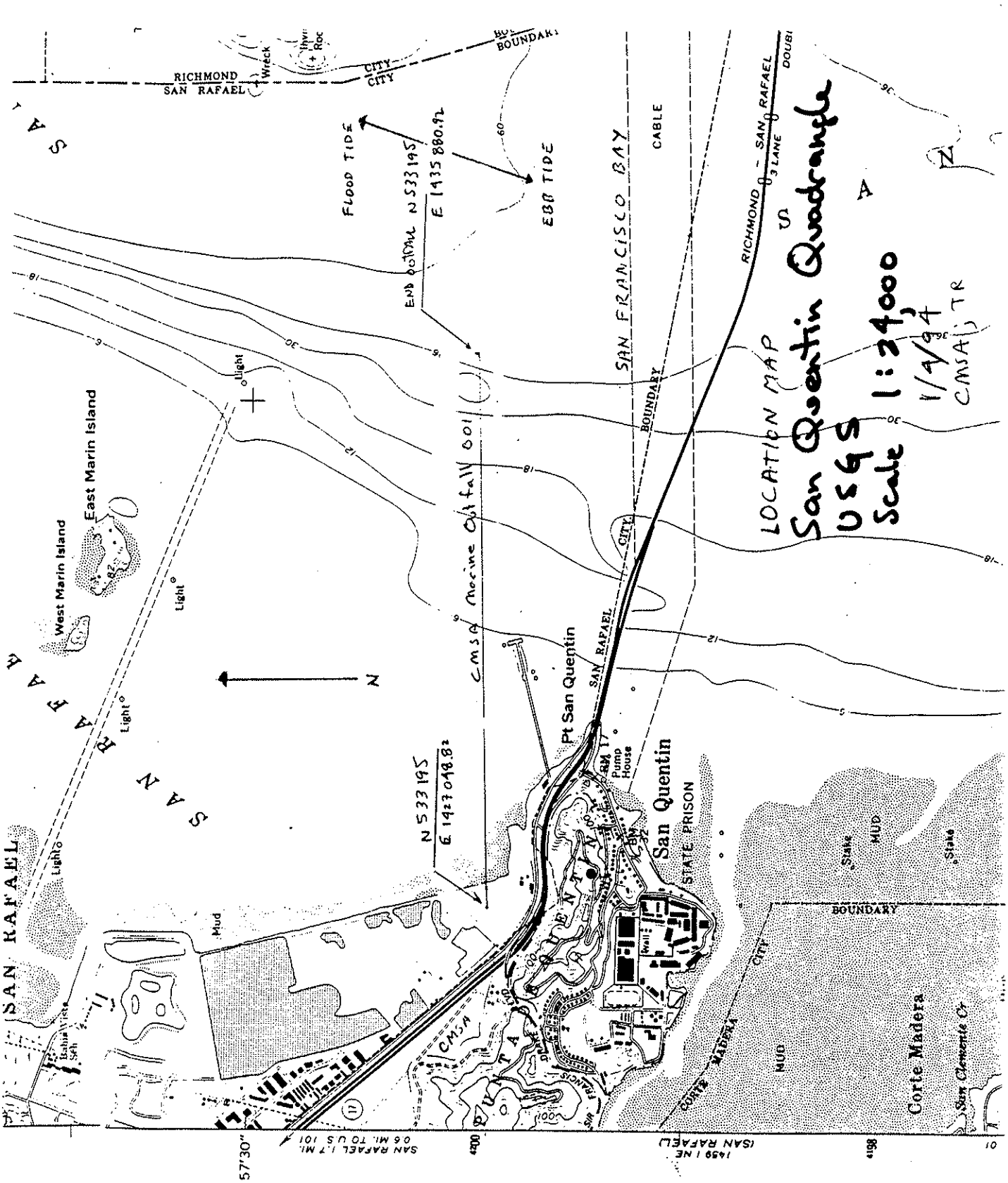
I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on March 20, 1996.

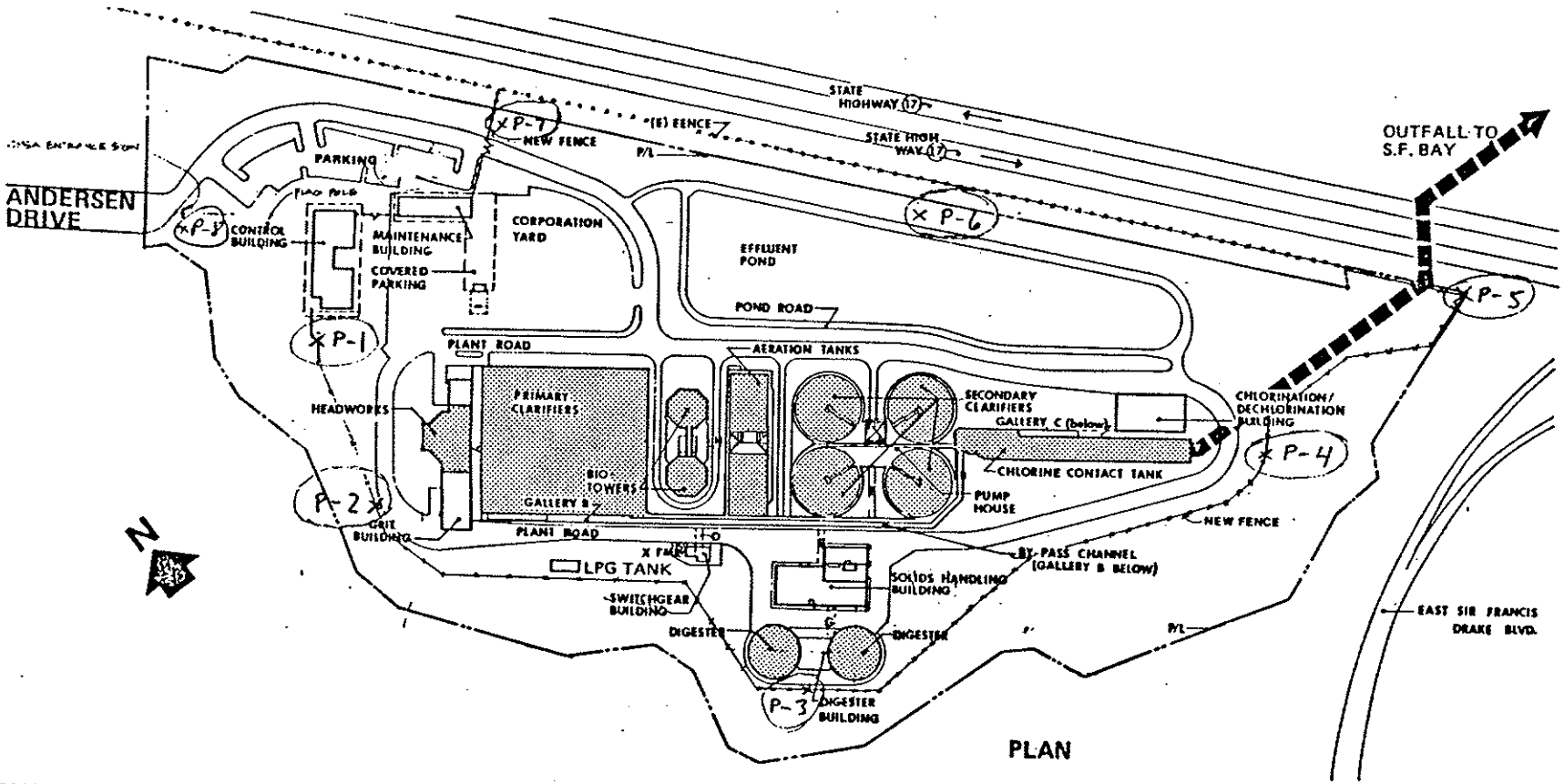
LORETTA K. BARSAMIAN
Executive Officer

Attachments:

A. Location/Site Maps
B. Treatment Process Schematic Diagram
C. Contingency Plan - Regional Water Board Resolution No. 74-10
D. Self-Monitoring Program
E. Regional Water Board NPDES Standard Provisions and Reporting Requirements - August 1993

Attachment A: Location Maps





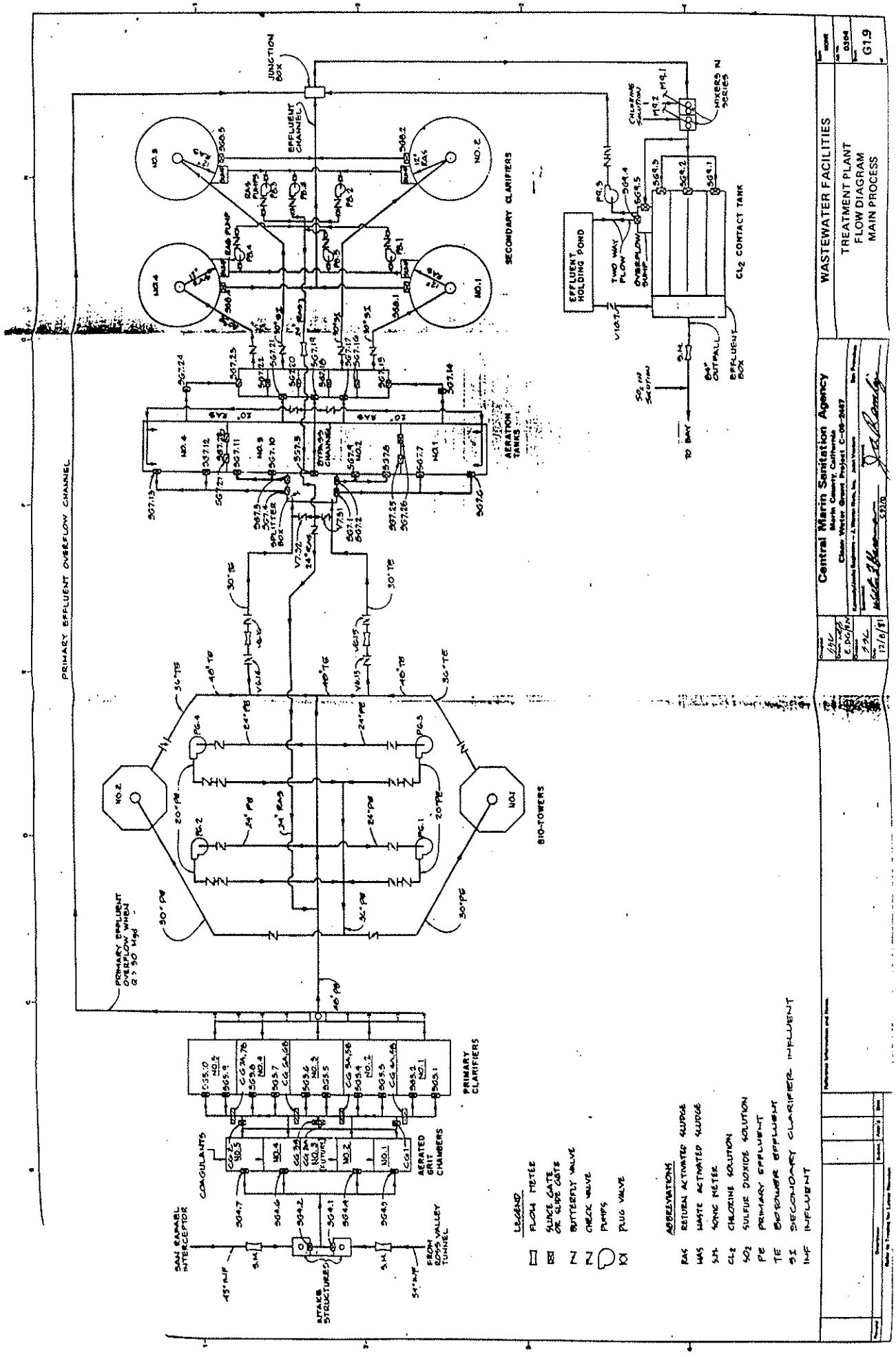
PLAN

CMSA Subregional System

The CMSA Treatment Plant serves Ross Valley Sanitary District (SD No. 1), Town of Corte Madera (SD No. 2), City of Larkspur, City of San Rafael, portions of unincorporated Marin County, and San Quentin Prison. Fifteen remote pump stations pump raw sewage to the plant through two pressure interceptors, sizes 45-inch and 54-inch. An 84-inch outfall conveys treated effluent to San Francisco Bay north of the Richmond-San Rafael Bridge. Discharge is through 351 3-inch diffusers into 10 feet of water.

CMSA CENTRAL MARIN SANITATION AGENCY

Attachment C: Treatment Process Schematic Diagram



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

CENTRAL MARIN SANITATION AGENCY
SAN RAFAEL
MARIN COUNTY

NPDES PERMIT NO. CA0038628

ORDER NO. 96-034

CONSISTS OF

PART A
(Self-Monitoring Program, Part A, NPDES Permits; dated August 1993.)

AND

PART B

SELF-MONITORING PROGRAM
PART B

FOR
CENTRAL MARIN SANITATION AGENCY

I. DESCRIPTION OF SAMPLING STATIONS

Station	Description
A. INFLUENT	
A-001	At any point in the treatment facilities headworks at which all waste tributary to the system is present and preceding any phase of treatment.
B. EFFLUENT	
E-001	At any point in the outfall between the point of discharge and the point at which all waste tributary to the outfall is present. (May be the same as E-001-D).
E-001-D	At any point in the disinfection facilities for Waste E-001 at which adequate contact with the disinfectant is assured.
E-001-S	At any point in the disposal facilities following dechlorination.
C. RECEIVING WATERS	
C-1	At a point in San Pable Bay directly above the center of the discharge diffuser.
C-2	At a point in San Pable Bay located 200 feet southerly from the geometric center of the discharge diffuser.
C-3	At a point in San Pablo Bay located 200 feet northerly from the geometric center of the discharge diffuser.
C-4	At a point in San Pablo Bay located 200 feet easterly from the geometric center of the discharge diffuser.
C-5	At a point in San Pablo Bay located 200 feet westerly from the geometric center of the discharge diffuser.

C-6 At a point in San Pablo Bay located 2000 feet northerly from the geometric center of the discharge diffuser.

D. LAND OBSERVATIONS

P-1 thru P-'n' Located at the corners and midpoints of the perimeter fence line surrounding the treatment facilities. (A sketch showing the locations of these stations will accompany each report).

E. OVERFLOWS AND BYPASSES

O-1 thru O-'n' At points in the collection system including manholes, pump stations, or any other location where overflows or bypasses occur.

II. SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSIS

The schedule of sampling, measurements and analysis shall be that given as Table I and Table I Footnotes.

III. REPORTING REQUIREMENTS

A. General Reporting Requirements are described in Section E of the Board's "Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge Permits", dated August 1993.

B. A Self-Monitoring Report shall be submitted for each calendar month. The report shall be received no later than the 15th day of the following month. The required contents of these reports are described in Section F.4 of Part A.

C. An Annual Report shall be submitted for each calendar year. The report shall be submitted to the Board by January 30 of the following year. The required contents of the report are described in Section F.5 of Part A. The report shall also include information regarding the amount of sludge disposed of, and the landfill(s) to which it was sent.

D. Any overflow, bypass or significant non-compliance incident that may endanger health or the environment shall be reported in accordance with Sections F.1 and F.2 of Part A, and any additional reporting guidance as may be provided by Board staff. The date, time, duration, location, estimated volume of wastewater discharged, and corrective actions taken for these events shall be reported in the monthly Self-Monitoring Reports.

IV. MODIFICATION OF PART A (AUGUST 1993)

A. This monitoring program does not include the following sections of Part A:

C.2.d; C.2.f; C.3; C.4; C.5; D.4; and E.3.

I, Loretta K. Barsamian, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 96-034.

2. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

3. Is effective as of March 20, 1996.

Loretta K. Barsamian
Executive Officer

Attachment: Table I - Schedule for Sampling, Measurements and Analyses

TABLE 1
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS [1] [10]

Sampling Station:	A-001		E-001			E-001-S		O	P	C
Type of Sample: / **Parameter** (units) [notes]	C-24	Co	G	C-24	Co	C-24	G	Ob	Ob	G
Flow Rate (mgd) [2]		D			D					
BOD_5 (mg/L & kg/d)	W			W						
Chlorine Residual (mg/L) [3]							Co/2h			
Settleable Matter (ml/L-hr)			3/W							
TSS (mg/L & kg/d)	W			3/W						
Oil & Grease (mg/L & kg/d)										
Total Coliform (MPN/100 ml)							3/W			
Acute Toxicity (% Surv.) [5]						M				
Ammonia Nitrogen (mg/L & kg/d)				W[4]		M[6]				
Nitrate Nitrogen (mg/L & kg/d)										
Nitrite Nitrogen (mg/L & kg/d)										
Total Organic Nitrogen (mg/L & kg/d)										
Turbidity (NTU) [7]						Co				
pH (units) [7]			3/W			Co	D [6]			
D.O. (mg/L & % Sat)			3/W				D [6]			
Temperature (° C)							D [6]			
Apparent Color (color units)										
Total & Dissolved Sulfides (mg/L) [8]			D							
Arsenic (µg/L & kg/d)				M						
Cadmium (µg/L & kg/d)				M						
Chromium IV (µg/L & kg/d)				M						
Copper (µg/L & kg/d)				M						
Cyanide (µg/L & kg/d)				Q						
Silver (µg/L & kg/d)				M						
Lead (µg/L & kg/d)				M						

TABLE 1 (continued)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station:	A-001		E-001			E-001-S		O	P	C
Type of Sample: **Parameter** (units) [notes]	C-24	Co	G	C-24	Co	C-24	G	Ob	Ob	G
Mercury (µg/L & kg/d)				M						
Nickel (µg/L & kg/d)				M						
Selenium (µg/L & kg/d)				M						
Zinc (µg/L & kg/d)				M						
Phenols (µg/L & kg/d)				Q						
PAHs (µg/L & kg/d) [9]										
Applicable Standard Observations			D					E	W	
Unionized Ammonia (mg/L as N)										

LEGEND FOR TABLE 1:

Types of Stations:

A = treatment facility influent
E = treatment facility effluent
O = overflow and bypass points
P = treatment facility perimeter
C = receiving water

Types of Samples:

C-24 = composite sample, 24 hours
Co = continuous sampling
G = grab sample
Ob = observation

Frequency of Sampling:

D = once each day
W = once each week
2/W = two times each week (on separate days)
3/W = three times each week (on separate days)
M = once each month
2/M = twice each month (with at least two week intervals)
Q = once each calendar quarter (with at least two month intervals)
E = each occurrence
Co/2h = continuous or every two hours

FOOTNOTES FOR TABLE 1

[1] BYPASS MONITORING

During any time when bypassing occurs from any treatment process (primary, secondary, chlorination, dechlorination, etc.) in the treatment facilities, the self-monitoring program shall include the following sampling and analyses in addition to the Table 1 schedule:

a. When bypassing occurs from any primary or secondary treatment unit(s), composite samples on an hourly basis for the duration of the bypass event for BOD and TSS analyses, grab samples at least daily for Settleable Matter, and continuous monitoring of flow.

b. When bypassing the chlorination process, grab samples at least daily for Total Coliform analyses; and continuous monitoring of flow.

c. When bypassing the dechlorination process, grab samples hourly for chlorine residual; and continuous monitoring of flow.

[2] FLOW MONITORING

Flows shall be measured continuously, and recorded and reported Daily. For effluent flows, the following information shall also be reported, monthly:

Average Daily Flow	(mgd)
Maximum Daily Flow	(mgd)
Minimum Daily Flow	(mgd)

[3] Chlorine Residual concentrations shall be monitored both prior to and following dechlorination. The chlorine residual analyzer at the reclamation facility shall be equipped with an alarm relayed to a central station.

[4] Ammonia nitrogen will continue to be monitored weekly during the months of July, August and September. Monthly monitoring may occur during the remaining months.

[5] Fish Toxicity shall be determined using 96-hour flow through bioassay using 24-hour composite samples representative of the discharged effluent. Test species shall be three-spined stickleback. Effluent used for fish bioassays must be undiluted, disinfected, dechlorinated effluent.

[6] These parameters shall be tested for only on the sample stream used for the flow-through bioassays, beginning at the start of the bioassay and then daily for the duration of the bioassay test (i.e. at 0,24, 48, 72, and 96 hours from the start of the bioassay test). Ammonia nitrogen shall be tested once during the bioassay.

[7] An in-line turbidimeter and pH meter shall continuously monitor effluent quality at the facility. The pH meter shall be equipped with an alarm relayed to a central station.

[8] Testing Total & Dissolved Sulfides only if DO < 2.0 mg/l.

[9] Testing of Polynuclear Aromatic Hydrocarbons (PAHs) as part of the NPDES requirements has been eliminated based on past compliance records. However, CMSA shall continue to test PAHs annually as part of the testing required under the pretreatment program. USEPA Method 625 shall be used for the test.

[10] Grab samples shall be taken on day(s) of composite sampling.